Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Graphing Calculator Notes**

**Finding the Vertex Example:**

1. **Graph** the quadratic equation. y = -2x2 + 4x -8
2. Check and adjust the **window** so the graph can be seen.
3. Press the **calc** key (2nd trace).
4. Press **3:Minimum** or **4:Maximum**.
5. **Move the cursor to a position that is left** (bound) of the vertex
6. **Move the cursor to a position that is right** (bound) of the vertex
7. **The vertex will be displayed on the screen**.

Determine if the graph opens up or down and if it will have a minimum or a maximum.

**Find the axis of symmetry and the vertex using the graphing calculator.**

**Sketch the graph below.**

**1.**  **2.**  **3.** 



**4.**  **5.**  **6.**  



***Mixed Practice Problems***

**Complete without using a graphing calculator. Show your work.**

**Determine if the graph opens up or down and find the vertex.** *(you can check your work with the calculator)*

1.  2.  3. 



4.  5.  6. 



**Complete using a graphing calculator. Determine if the graph opens up or down and the vertex.**

7.  8.  9. 

